

Safety data sheet

according to Regulation (EC) No. 1907/2006

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Printing date: 21.03.2023

Revision: 21.03.2023

Version number: 1.11 (replaces version 1.01)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: *Grate Grill Power Cleaner*

· Brand: MELLERUD

· Assortment: CLASSIC

· Article number: 2001002701

· EAN-Code: 4004666002701

· Registration number This product is a mixture. REACH registration number see section 3.

· UFI: QM60-40WK-W008-SNQT

· 1.2 Relevant identified uses of the substance or mixture and uses advised against

· Application of the substance / the mixture Cleaning agent, alkaline

· Uses advised against This product must not be used in applications other than the above without first seeking the advice of the supplier.

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

MELLERUD CHEMIE GmbH

Bernhard-Röttgen-Waldweg 20

D-41379 Brüggen (Niederrhein)

📞 : +49 (0) 2163 / 950 90 999

✉: service@mellerud.de

🌐: www.mellerud.de

· Informing department:

Department Regulatory Affairs

✉: labor@mellerud.de

· 1.4 Emergency telephone number:

· Advisory office in case of poisoning:

Germany: Poison Emergency Call Berlin (24 h) ☎ : +49 (0)30/30686700

Austria: Poisoning Information Centre ☎ : +43-(0)1-406 43 43; Währinger Gürtel 18-20, 1090 Vienna

Luxembourg: Centre Anti-Poisons/Antigifcentrum ☎ : (+352) 8002 5500

· Telephone number of the company in case of emergencies:

📞 : +49 (0) 2163 / 950 90 - 999 during office hours: Monday to Sunday 8:00 - 20:00

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

The product is classified and labelled according to the CLP regulation.

· Classification according to Regulation (EC) No 1272/2008

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008 The product is labelled according to the CLP regulation.

· Hazard pictograms



GHS05

· Signal word Danger

· Hazard-determining components of labelling:

sodium hydroxide (SODIUM HYDROXIDE)

Alkyl ether carboxylic acid, sodium salt (SODIUM LAURETH CARBOXYLATE)

Phosphoric acid, 2-ethylhexyl ester

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Hazard statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P260 Do not breathe mist.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P405 Store locked up.
P501 Dispose of contents/container to a household waste recycling centre as hazardous waste except for empty containers which can be disposed of by recycling. Contact your local council for details.

Special rules on packaging:

Tactile warning (EN/ISO 11683).
Child-proof closures (EN/862/ISO 8317).

2.3 Other hazards None, if used properly.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Determination of endocrine-disrupting properties

This mixture does not contain any components that have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% by weight or more.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Aqueous alkaline solution of surfactants

Dangerous components:

CAS: 1310-73-2 EINECS: 215-185-5 Reg.nr.: 01-2119457892-27-XXXX	sodium hydroxide (SODIUM HYDROXIDE) Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0.5 % ≤ C < 2 % Eye Dam. 1; H318: C ≥ 2 % Eye Irrit. 2; H319: 0.5 % ≤ C < 2 %	5 – < 10%
CAS: 33939-64-9 Polymer	Alkyl ether carboxylic acid, sodium salt (SODIUM LAURETH CARBOXYLATE) Eye Dam. 1, H318 Skin Irrit. 2, H315	≥ 3 – < 5%
CAS: 112-34-5 EINECS: 203-961-6 Reg.nr.: 01-2119475104-44-XXXX	2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL) Eye Irrit. 2, H319	2.5 – < 5%
CAS: 124-17-4 EINECS: 204-685-9 Reg.nr.: 01-2119475110-51-XXXX	2-(2-butoxyethoxy)ethyl acetate (BUTETH-2 ACETATE) substance with a Community workplace exposure limit	1 – < 2.5%
CAS: 12645-31-7 EINECS: 235-741-0 Reg.nr.: 01-2119896587-XXXX	Phosphoric acid, 2-ethylhexyl ester Skin Corr. 1B, H314; Eye Dam. 1, H318	1 – < 2.5%

SVHC

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of ≥ 0.1 % (w/w).

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· **Regulation (EC) No 648/2004 on detergents / Labelling for contents**

anionic surfactants, phosphates, amphoteric surfactants, phosphonates

<5%

preservation agents (2-BROMO-2-NITROPROPANE-1,3-DIOL)

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information**

Instantly remove any clothing soiled by the product.

In all cases of doubt, or when symptoms persist, seek medical advice.

Show safety data sheet if possible.

· **After inhalation**

Supply fresh air.

If unconscious but breathing normally, place in recovery position.

Seek medical treatment in case of complaints.

· **After skin contact**

Instantly rinse with water.

If skin irritation or rash occurs: Get medical advice/attention.

· **After eye contact**

Risk of blindness!

Remove contact lenses, if present and easy to do.

Rinse immediately carefully and thoroughly with eye-bath or water for 15 minutes. Seek medical advice immediately.

Protect uninjured eye.

· **After swallowing**

Make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

· **4.2 Most important symptoms and effects, both acute and delayed**

· **After inhalation** No known effects or symptoms in normal use.

· **After skin contact** Causes severe skin burns and eye damage.

· **After eye contact** Causes severe or permanent damage.

· **After swallowing**

Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

· **4.3 Indication of any immediate medical attention and special treatment needed**

Call a doctor or poison control center for guidance.

Treat symptomatically

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents** CO₂, extinguishing powder or water jet. Fight larger fires with water jet.

· **For safety reasons unsuitable extinguishing agents** For this mixture no limitations of extinguishing agents are given.

· **5.2 Special hazards arising from the substance or mixture**

Hazardous combustion products may include:

Carbon monoxide (CO) and Carbon dioxide (CO₂)

This product will react with aluminium, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air.

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Corrosive gases/vapors
Sulfur oxide (SOx)
Inhalation of hazardous decomposition products presents a serious health hazard.

· 5.3 Advice for firefighters

· Protective equipment:

Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).
Wear a self-contained breathing apparatus.
Do not inhale explosion gases or combustion gases.

· Additional information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

· For non-emergency personnel

For non emergency personnel: Avoid contact with skin, eyes and clothing. Isolate hazard area and deny entry to unnecessary or unprotected personnel.

· For emergency responders

For emergency responders: Wear protective clothing. See Chapter 8

· 6.2 Environmental precautions:

Dilute with much water.
If large amounts are released contact the fire service.
Inform authorities if large amounts are released.
Do not allow to enter into surface water or drains.

· 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.
Absorb spillage to prevent material damage.
Wipe up with absorbent material (e.g. cloth, fleece, sand, diatomite, acid binders, universal binders).
Collect in closed and suitable containers for disposal.
Dispose of the material collected according to regulations.
Dilute product with plenty of water and rinse away.

· 6.4 Reference to other sections

See section 7 for information on safe handling.
See section 8 for information on personal protection equipment.
See section 13 for information on disposal.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

No special precautions necessary if used correctly.

· Information about protection against explosions and fires:

No special measures required.

· Hygiene measures

Avoid contact with skin and eyes. Remove soiled or soaked clothing immediately. Wash off any contamination that gets onto the skin with plenty of water, skin care. Protective equipment only required in case of industrial use or for large packs (not for household packs)

· Handling

Observe label precautions.
Read carefully and follow all instructions.

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· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage**

· **Requirements to be met by storerooms and containers:** Store product only in original packaging and closed.

· **Information about storage in one common storage facility:**

Do not store together with: Acids.

For incompatible materials see subsection 10.5.

· **Further information about storage conditions:**

Keep container tightly closed.

Keep locked up and out of reach of children.

Follow national regulations.

· **Recommended storage temperature:** Store dry, between +5 °C and +40 °C

· **Storage class** LGK 8B: Non-combustible corrosive substances

· **7.3 Specific end use(s)** See section 1.2

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **8.1.1 Components with critical values that require monitoring at the workplace:**

CAS: 1310-73-2 sodium hydroxide (SODIUM HYDROXIDE)

MAK (Austria)	Short-term value: 4 E mg/m ³ Long-term value: 2 E mg/m ³ vgl.Abschn.IIb
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CAS: 112-34-5 2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL)

IOELV (European Union)	Short-term value: 101.2 mg/m ³ , 15 ppm Long-term value: 67.5 mg/m ³ , 10 ppm
MAK (Austria)	Short-term value: 101.2 mg/m ³ , 15 ppm Long-term value: 67.5 mg/m ³ , 10 ppm
AGW (Germany)	Long-term value: 67 mg/m ³ , 10 ppm 1.5(l);EU, DFG, Y, 11

CAS: 124-17-4 2-(2-butoxyethoxy)ethyl acetate (BUTETH-2 ACETATE)

AGW (Germany)	Long-term value: 67 mg/m ³ , 10 ppm 1.5(l);DFG, Y, 11
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· **Occupational exposure limits of decomposition products:** No data available / Not applicable

· **8.1.2 DNELs**

CAS: 1310-73-2 sodium hydroxide (SODIUM HYDROXIDE)

DNEL Long-term – inhalation, local effects	1 mg/m ³
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CAS: 112-34-5 2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL)

DNEL Long-term – dermal, systemic effects	20 mg/kg-bw/day
DNEL Long-term – inhalation, local effects	67.5 mg/m ³
DNEL Long-term – inhalation, systemic effects	67.5 mg/m ³

· **8.1.3 PNECs**

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL)

PNEC aquatic, freshwater	1 mg/l
PNEC sewage treatment plant	200 mg/l
PNEC sediment, freshwater	4 mg/kg dw
PNEC aquatic, intermittent release	3.9 mg/l
PNEC sediment, marine water	0.4 mg/kg dw
PNEC aquatic, marine water	0.1 mg/l

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· **8.1.4 Ingredients with biological limit values:** No data available.

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **8.2 Exposure controls**

Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.

· **8.2.1 Engineering Controls:** See section 7. No additional measures necessary.

· **8.2.2 Individual protection measures, such as personal protective equipment**

For special purposes, it is recommended to check the resistance to chemicals of the protective clothing/gloves mentioned below together with the supplier of the PPE.

· **Breathing equipment:** Respiratory protection normally not required. Avoid inhalation of vapours, spray, gas or aerosols.

· **Hand protection**

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

· **Full contact:**

Material: Nitrile rubber

Minimum layer thickness: $\geq 0,11$ mm

Break through time: 480 min

· **Splash contact:**

Material: Nitrile rubber

Minimum layer thickness: $\geq 0,11$ mm

Break through time: 480 min

· **Material of gloves**

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact). The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet applied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

· **Eye/face protection**

Tightly sealed safety glasses according to EN166.

Face protection

· **Body protection:**

No special requirements under normal use conditions.

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

· **8.2.3 Environmental exposure controls** See sections 6 and 7.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Fluid

· **Colour:**

Clear

· **Smell:**

Weak, characteristic

· **Odour threshold:**

Not applicable and/or not determined for the mixture

· **9.1.2 Safety relevant basic data:**

Not applicable and/or not determined for the mixture

· **Melting point/freezing point:**

≥ 100 °C (H₂O)

· **Boiling point or initial boiling point and boiling range**

Not applicable and/or not determined for the mixture

· **Flammability**

Not applicable and/or not determined for the mixture

· **Lower and upper explosion limit**

Not applicable and/or not determined for the mixture

· **Lower:**

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· Upper:	Not applicable and/or not determined for the mixture
· Flash point:	> 65 °C (EN ISO 13736)
· Auto-ignition temperature:	Product is not selfigniting.
· Decomposition temperature:	Not applicable and/or not determined for the mixture
· pH at 20 °C	13 – 14 (CIPAC MT 75.3)
· Acidity/alkalinity:	Not applicable and/or not determined for the mixture
· Viscosity:	Not applicable and/or not determined for the mixture
· Surface tension:	Not applicable and/or not determined for the mixture
· dynamic:	Not applicable and/or not determined for the mixture
· Solubility	Fully miscible
· Water:	Not applicable and/or not determined for the mixture
· Partition coefficient n-octanol/water (log value)	≤ 23 hPa (H ₂ O)
· Steam pressure at 20 °C:	
· Density and/or relative density	
· Density at 20 °C	≥ 1.049 – ≤ 1.053 g/cm ³ (ISO 387)
· Relative density	~1.051 (EC method A.3)
· Vapour density	Not applicable and/or not determined for the mixture
· 9.2 Other information	
· Appearance:	
· Form:	Liquid
· Important information on protection of health and environment, and on safety.	
· Self-inflammability:	Product is not selfigniting.
· Explosive properties:	Product is not explosive.
· Change in condition	
· Cloud point / clarification point:	Not determinate.
· Oxidising properties	Not applicable and/or not determined for the mixture
· Evaporation rate	Not applicable and/or not determined for the mixture
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	May be corrosive to metals.
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** See section 10.3.

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No hazardous reaction is expected when handled and stored according to provisions, Stable under normal conditions of use.

· **10.3 Possibility of hazardous reactions**

Strong exothermic reaction with acids/acidic products.

Corrosive action on metals

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Heating occurs when water is added.

Reacts with metals forming hydrogen

Reacts with strong oxidizing agents.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:**

Light alloys e.g. aluminium

Strong acids

Strong oxidizing agents

· **10.6 Hazardous decomposition products:**

Decomposition products in case of fire: see section 5.

Hazardous decomposition products are not expected to form during normal storage.

SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

· **Acute toxicity** The mixture is classified based on calculation method referring to the classified substances present in the mixture.

· **Hazardous substances:**

· **Experimental/calculated data:**

CAS: 1310-73-2 sodium hydroxide (SODIUM HYDROXIDE)

Acute oral toxicity	No study available	(Corrosive properties) (study scientifically not necessary)
Acute dermal toxicity	No study available	(Corrosive properties) (study scientifically not necessary)
Acute inhalation toxicity	No study available	(Corrosive properties) (study scientifically not necessary)

CAS: 33939-64-9 Alkyl ether carboxylic acid, sodium salt (SODIUM LAURETH CARBOXYLATE)

Acute oral toxicity	LD50	> 2,000 mg/kg bw (rat)
Acute dermal toxicity	No study available	
Acute inhalation toxicity	No study available	

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL)

Acute oral toxicity	LD50	7,291 mg/kg bw (rat) (OECD 401) 2,410 mg/kg bw (mousse) (OECD 401)
Acute dermal toxicity	LD50	2,764 mg/kg bw (rabbit) (OECD402)
Acute inhalation toxicity	LC 50	(Classification criteria not met) (LC50 greater than near-saturated vapor conc.)

CAS: 124-17-4 2-(2-butoxyethoxy)ethyl acetate (BUTETH-2 ACETATE)

Acute oral toxicity	LD50	12,000 mg/kg bw (rat) (OECD 401)
Acute dermal toxicity	LD50	> 5,000 mg/kg bw (rabbit) (OECD 402)
Acute inhalation toxicity	LC50	(LC50 greater than near-saturated vapor conc.)

CAS: 12645-31-7 Phosphoric acid, 2-ethylhexyl ester

Acute oral toxicity	LD50	2,500 mg/kg bw (rat) (OECD 423)
Acute dermal toxicity	No study available	(study scientifically not necessary)
Acute inhalation toxicity	No study available	(study scientifically not necessary)

· **Acute toxicity estimate (ATE(MIX)) - Calculation method:**

Acute oral toxicity	-	(Corrosive properties)
Acute dermal toxicity	-	(Corrosive properties)
Acute inhalation toxicity	-	(Corrosive properties)

· **Skin corrosion/irritation** Substance data, where relevant and available, are listed below:

· **Hazardous substances:**

· **Experimental/calculated data:**

CAS: 1310-73-2 sodium hydroxide (SODIUM HYDROXIDE)

Result/evaluation:	Skin corrosion, Sub-category 1A	(Harmonised (legal) classification.)
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CAS: 33939-64-9 Alkyl ether carboxylic acid, sodium salt (SODIUM LAURETH CARBOXYLATE)

Result/evaluation:	Irritant	(Source: Supplier safety data sheet)
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CAS: 112-34-5 2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL)

Result/evaluation:	No irritation	(rabbit) (OECD404)
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CAS: 124-17-4 2-(2-butoxyethoxy)ethyl acetate (BUTETH-2 ACETATE)

Result/evaluation:	No irritation	(rabbit)
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CAS: 12645-31-7 Phosphoric acid, 2-ethylhexyl ester

Result/evaluation:	Causes severe burns	(rabbit) (OECD404)
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· **Product/Mixture:** The mixture is classified based on calculation method referring to the classified substances present in the mixture.

· **Classification:**

Skin corrosion, Sub-category 1A	(Skin Corr. 1A, H314)
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· **Serious eye damage/irritation** Substance data, where relevant and available, are listed below:

· **Hazardous substances:**

· **Experimental/calculated data:**

CAS: 1310-73-2 sodium hydroxide (SODIUM HYDROXIDE)

Result/evaluation:	Serious eye damage, Category 1	(Harmonised (legal) classification.)
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CAS: 33939-64-9 Alkyl ether carboxylic acid, sodium salt (SODIUM LAURETH CARBOXYLATE)

Result/evaluation:	Causes serious eye damage	(Source: Supplier safety data sheet)
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CAS: 112-34-5 2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL)

Result/evaluation:	Irritant	(rabbit) (No guideline followed)
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CAS: 124-17-4 2-(2-butoxyethoxy)ethyl acetate (BUTETH-2 ACETATE)

Result/evaluation:	Not irritating	(rabbit)
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CAS: 12645-31-7 Phosphoric acid, 2-ethylhexyl ester

Result/evaluation:	Serious eye damage, Category 1	(study scientifically not necessary)
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· **Product/Mixture:** The mixture is classified based on calculation method referring to the classified substances present in the mixture.

· **Classification:**

Serious eye damage, Category 1	(Eye Dam. 1, H318)
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· **Respiratory or skin sensitisation** Substance data, where relevant and available, are listed below:

· **Hazardous substances:**

· **Experimental/calculated data:**

CAS: 1310-73-2 sodium hydroxide (SODIUM HYDROXIDE)

Result/evaluation:	Does not cause skin sensitisation	(Human) (Human Patch Test)
	Does not cause respiratory sensitization	(Not relevant) (study scientifically not necessary)

CAS: 33939-64-9 Alkyl ether carboxylic acid, sodium salt (SODIUM LAURETH CARBOXYLATE)

Result/evaluation:	Does not cause skin sensitisation	(Source: Supplier safety data sheet)
	Does not cause respiratory sensitization	(no study available)

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL)

Result/evaluation:	Does not cause skin sensitisation	(guinea pig) (OECD406)
	Does not cause respiratory sensitization	(Not classified (data lacking)) (no study available)

CAS: 124-17-4 2-(2-butoxyethoxy)ethyl acetate (BUTETH-2 ACETATE)

Result/evaluation:	Does not cause skin sensitisation	(guinea pig) (EU Method B.6)
	Does not cause respiratory sensitization	(Not classified (data lacking))

CAS: 12645-31-7 Phosphoric acid, 2-ethylhexyl ester

Result/evaluation:	Does not cause skin sensitisation	(study scientifically not necessary)
	Does not cause respiratory sensitization	(study scientifically not necessary)

· **Product/Mixture:** The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

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Classification:

Not classified as sensitizing (Classification criteria not met)

Germ cell mutagenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.
Based on available data, the classification criteria are not met.

Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.
Based on available data, the classification criteria are not met.

Reproductive toxicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.
Based on available data, the classification criteria are not met.

STOT-single exposure

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.
Based on available data, the classification criteria are not met.

STOT-repeated exposure

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.
Based on available data, the classification criteria are not met.

Aspiration hazard

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.
Based on available data, the classification criteria are not met.

Additional toxicological information: Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information

12.1 Toxicity

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

Aquatic toxicity: Substance data, where relevant and available, are listed below:

Hazardous substances:

CAS: 1310-73-2 sodium hydroxide (SODIUM HYDROXIDE)

EC50/48 h 40.4 mg/l (Daphnia magna (water flea))

CAS: 33939-64-9 Alkyl ether carboxylic acid, sodium salt (SODIUM LAURETH CARBOXYLATE)

LC50/96 h 7.5 mg/l (fish)

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL)

LC50/48 h 2,750 mg/l (Leuciscus idus (ide)) (DIN 38412 Teil 15)

EC50/48 h > 100 mg/l (Daphnia magna (water flea)) (OECD 202)

CAS: 124-17-4 2-(2-butoxyethoxy)ethyl acetate (BUTETH-2 ACETATE)

EC50/48 h 664 mg/l (Daphnia magna (water flea))

LC50/96 h 60 mg/l (fish) (OECD 203)

IC50/72 h 1,570 mg/l (algae) (ISO 8692)

CAS: 12645-31-7 Phosphoric acid, 2-ethylhexyl ester

EC50/48 h > 100 mg/l (Daphnia magna (water flea)) (OECD 202)

EC0 100 – 1,000 mg/l (bacteria)

LC0/48 h > 250 mg/l (Leuciscus idus (ide))

Product/Mixture: The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Classification:

Not classified as hazardous to the environment (Classification criteria not met)

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· **12.2 Persistence and degradability**

· Hazardous substances:

CAS: 1310-73-2 sodium hydroxide (SODIUM HYDROXIDE)

Persistence	(Degradation by hydrolysis)
Biodegradability	(Not applicable, inorganic substance)

CAS: 33939-64-9 Alkyl ether carboxylic acid, sodium salt (SODIUM LAURETH CARBOXYLATE)

Persistence	(No data available)
Biodegradability	(Readily biodegradable)

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL)

Persistence	(No data available)
Biodegradability	> 80 % (28 d) (OECD301C Modified MITI Test)

CAS: 124-17-4 2-(2-butoxyethoxy)ethyl acetate (BUTETH-2 ACETATE)

Persistence	(No data available)
Biodegradability	100 % (20 d) (OECD301 B CO2 Evolution Test)

CAS: 12645-31-7 Phosphoric acid, 2-ethylhexyl ester

Persistence	(No data available)
Biodegradability	98 % (28 d) (OECD301 B CO2 Evolution Test)

· **Other information:**

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the member states and will be made available to them, at their direct request or at the request of a detergent manufacturer.

· **12.3 Bioaccumulative potential**

· Hazardous substances:

CAS: 1310-73-2 sodium hydroxide (SODIUM HYDROXIDE)

Bioaccumulative potential	(Not relevant)
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CAS: 33939-64-9 Alkyl ether carboxylic acid, sodium salt (SODIUM LAURETH CARBOXYLATE)

Bioaccumulative potential	(Bioaccumulation is not expected)
---------------------------	-----------------------------------

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol (BUTOXYDIGLYCOL)

Bio concentration factor (BCF)	> 100
log Pow	0.56 (experimental)

CAS: 124-17-4 2-(2-butoxyethoxy)ethyl acetate (BUTETH-2 ACETATE)

Bio concentration factor (BCF)	1.99 (calculation method)
--------------------------------	---------------------------

CAS: 12645-31-7 Phosphoric acid, 2-ethylhexyl ester

Bioaccumulative potential	(No data available) (study scientifically not necessary)
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· **12.4 Mobility in soil** No substance data available

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

· **Remark:** Harmful effect on fish, planktonic and sessile organisms is possible due to pH shift.

· **Behaviour in sewage processing plants:** No substance data available

· **Respiratory inhibition of communal activated sludge EC 20 (mg/l according to ISO 8192 B):** No substance data available

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· **Additional ecological information:**

· **BSB5-value:** Remarks: No data available

· **General notes:**

Avoid entering sewage water or drainage ditch undiluted or unneutralised.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **13.1.1 Appropriate disposal / Product/Mixture:**

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to enter sewage system.

Hand over to disposers of hazardous waste.

Dispose of in accordance with local and national regulations.

· **List of proposed waste codes/waste designations in accordance with EWC:**

07 00 00	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 06 00	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 01*	aqueous washing liquids and mother liquors
20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 29*	detergents containing hazardous substances
15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 10*	packaging containing residues of or contaminated by hazardous substances
HP8	Corrosive

· **13.1.2 Appropriate disposal / Package:**

· **13.1.2 Recommendation:** Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

· **Recommended cleaning agent:** Use water, if necessary with cleaning agent.

SECTION 14: Transport information

· **14.2 UN proper shipping name**

· **UN number or ID number**

UN1719

· **ADR/RID/ADN, IMDG, IATA**

UN1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE)

· **ADR/RID/ADN**

CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE)

· **14.3 Transport hazard class(es)**

· **ADR/RID/ADN**



· **Class**

8 (C5) Corrosive substances.

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· Label	8
· IMDG, IATA	
	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	
· ADR/RID/ADN, IMDG, IATA	II
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Kemler Number:	80
· EMS Number:	F-A,S-B
· Segregation groups	(SGG18) Alkalies
· Stowage Category	A
· Segregation Code	SG22 Stow "away from" ammonium salts SG35 Stow "separated from" SGG1-acids
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR/RID/ADN	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE), 8, II

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· European Regulations and Directives:

Regulation (EC) No. 1907/2006 (REACH)
Regulation (EC) No. 1272/2008 (CLP, EU GHS)

· Directive on industrial emissions (VOCs, 2010/75/EU): 52.4 – < 52.6 g/l

· Deco-Paint Directive (2004/42/EC): Not regulated.

· Directive 75/324/EEC relating to aerosol dispensers: Not regulated.

· Regulation (EU) No. 528/2012 on biocides: Not regulated.

· Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]:
This product is not classified according to Directive 2012/18/EU.

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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- Regulation (EU) 2019/1148 on the marketing and use of explosives precursors: Not regulated.

- National regulations

Additionally, observe any national regulations!

Law for Detergents and Cleaning Products in German Federal Legislation (Wasch- und Reinigungsmittelgesetz, WRMG)

- Information about limitation of use:

Observe restrictions to employment for juveniles.

Observe employment restrictions for pregnant and nursing mothers.

- Ordinance on Hazardous Substances (12. BImSchV): See information on Directive 2012/18/EU.

Class	Share in %
NK	5 - < 10

- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

- Other regulations, limitations and prohibitive regulations

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

- Self-Service Regulation (BGBl. II No. 251/2015) The supply to private end consumers by self-service is prohibited!

- 15.2 Chemical safety assessment: A chemical safety assessment was not carried out for the mixture.

SECTION 16: Other information

- 16.1 Indication of changes: Not applicable (First edition)

- 16.2 Relevant R-, H- and EUH-phrases (number and full text):

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

- 16.3 Training hints

Provide adequate information, instruction and training for operators.

Please refer to our internet website for more information: www.mellerud.de

- 16.4 Sources of key data used to compile the Safety Data Sheet:

The quoted data are from, but not limited to, one or more sources of information:

Raw material SDS

Classification & labelling inventory of ECHA (http://echa.europa.eu/clp/c_l_inventory_en.asp)

CEFCIC ERICards Database (<http://www.ericards.net>)

eChemPortal (http://www.echemportal.org/ecemportal/index?pageID=0&request_locale=en)

GESTIS database (www.dguv.de/bgia/de/gestis/stoffdb/index.jsp)

Registered substances by ECHA (<http://echa.europa.eu/en/information-on-chemicals/registered-substances>)

- 16.5 Additional Information:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

- Classification for mixtures and used evaluation method according to regulation (EC)1207/2008 [CLP]:

Corrosive to metals	On basis of test data
Skin corrosion/irritation Serious eye damage/irritation	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

- Department issuing data specification sheet: Department Regulatory Affairs

- Contact: Robert Winkler winkler@mellerud.de

- Version number of previous version: 1.01

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16.6 Any Abbreviations and acronyms used in this document:

ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS – Australian Inventory of Chemical Substances; ASTM – American Society for the Testing of Materials; bw – Body weight; CLP – Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR – Carcinogen, Mutagen or Reproductive Toxicant; DIN – Standard of the German Institute for Standardisation; DSL – Domestic Substances List (Canada); ECHA – European Chemicals Agency; EC-Number – European Community number; ECx – Concentration associated with x% response; ELx – Loading rate associated with x% response; EmS – Emergency Schedule; ENCS – Existing and New Chemical Substances (Japan); ErCx – Concentration associated with x% growth rate response; GHS – Globally Harmonized System; GLP – Good Laboratory Practice; IARC – International Agency for Research on Cancer; IATA – International Air Transport Association; IBC – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 – Half maximal inhibitory concentration; ICAO – International Civil Aviation Organization; IECSC – Inventory of Existing Chemical Substances in China; IMDG – International Maritime Dangerous Goods; IMO – International Maritime Organization; ISHL – Industrial Safety and Health Law (Japan); ISO – International Organisation for Standardization; KECL – Korea Existing Chemicals Inventory; LC50 – Lethal Concentration to 50 % of a test population; LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL – International Convention for the Prevention of Pollution from Ships; n.o.s. – Not Otherwise Specified; NO(A)EC – No Observed (Adverse) Effect Concentration; NO(A)EL – No Observed (Adverse) Effect Level; NOELR – No Observable Effect Loading Rate; NZIoC – New Zealand Inventory of Chemicals; OECD – Organization for Economic Co-operation and Development; OPPTS – Office of Chemical Safety and Pollution Prevention; PBT – Persistent, Bioaccumulative and Toxic substance; PICCS – Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR – (Quantitative) Structure Activity Relationship; REACH – Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID – Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT – Self-Accelerating Decomposition Temperature; SDS – Safety Data Sheet; TCSI – Taiwan Chemical Substance Inventory; TRGS – Technical Rule for Hazardous Substances; TSCA – Toxic Substances Control Act (United States); UN – United Nations; vPvB – Very Persistent and Very Bioaccumulative

Used abbreviations and acronyms can be looked up at www.euphrac.eu.

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